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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | | |
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| 09/449,611 | 11/30/1999 | KAZUO SHIMURA | Q56989 | 6474 | | |
| | 590 03/27/2002 | | | | | |
| SUGHRUE MION ZION MACPEAK & SEAS | | | EXAMINER | | | |
| 2100 PENNSY WASHINGTO | LVANIA AVENUE NW N, DC 20037 | | PARKER, I | KENNETH | | |
| | | | ART UNIT | PAPER NUMBER | | |
| | | | 2871 | - | | |

DATE MAILED: 03/27/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

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Application No. 09/449,611 Applicant(s)

Shimura

Office Action Summary

Examiner

Art Unit Kenneth Parker

2871

| Period for Repty A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE | | | | | | | |
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| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE | | The MAILING DATE of this communication appears | on the cover she | et with th | e corres | | |
| 1) Responsive to communication(s) filed on Feb 23, 2002 2a) ☐ This action is FINAL. 2b) ☑ This action is non-final. 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213. Disposition of Claims 4() ☑ Claim(s) 15-25 | A SHI THE N - Exter af - If the be - If NO co - Failur - Any r | ORTENED STATUTORY PERIOD FOR REPLY IS SET MAILING DATE OF THIS COMMUNICATION. Insight of time may be available under the provisions of 37 CF of the SIX (6) MONTHS from the mailing date of this communication of the provision of 37 CF of the six of the second the second timely. In period for reply is specified above, the maximum statutory promound for reply is specified above, the maximum statutory promound for reply is specified above, the maximum statutory promound for reply within the set or extended period for reply will, by the preply received by the Office later than three months after the | FR 1.136 (a). In n ation. , a reply within the period will apply ar statute, cause the | o event, ho e statutory nd will expi e applicatio | owever, r minimum ire SIX (6 | may a reply be timely filed n of thirty (30) days will S) MONTHS from the mailing date ome ABANDONED (35 U.S.C. § 1 | 33). |
| 2a) ☐ This action is FINAL. 2b) ☑ This action is non-final. 3l ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213. Disposition of Claims 4l ☑ Claim(s) 15-25 | | | | | | | |
| 3 Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213. Disposition of Claims 4 Claim(s) 15-25 | 1) X | Responsive to communication(s) filed on Feb 23, 2 | 002 | | | · · · · · · · · · · · · · · · · · · · | • |
| closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11; 453 O.G. 213. Disposition of Claims 4 X Claim(s) 15-25 | 2a) 🗌 | This action is FINAL . 2b) 💢 This act | ion is non-final. | | | | |
| Aa) Of the above, claim(s) is/are pending in the application. is/are withdrawn from consideration. is/are withdrawn from consideration. is/are withdrawn from consideration. is/are allowed. is/are allowed. is/are rejected. | 3) 🗆 | | ' - ' | | | | |
| day of the above, claim(s) is/are withdrawn from consideration. 5 | - | | | | | | |
| Solution Solution | 4) 💢 | Claim(s) <u>15-25</u> | · · · · · · · · · · · · · · · · · · · | ···· | is/are | pending in the application. | |
| is/are rejected. is/are objected to. is/are objected to restriction and/or election requirement Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on | 4 | a) Of the above, claim(s) | | | is/are | e withdrawn from considerati | ion. |
| Claim(s) | 5) 🗆 | Claim(s) | | | | is/are allowed. | |
| Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on | 6) 💢 | Claim(s) <u>15-25</u> | | | | is/are rejected. | |
| Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on | 7) 🗆 | Claim(s) | | | | is/are objected to. | |
| 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on | 8) 🗆 | Claims | are | subject to | o restric | tion and/or election requirem | ent. |
| 13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d). a) All b) Some* c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). *See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e). Attachment(s) 15) Notice of References Cited (PTO-892) | 9) □ 10) □ 11) □ | The specification is objected to by the Examiner. The drawing(s) filed on is/are The proposed drawing correction filed on | is: | | | b)□ disapproved. | |
| 15) Notice of References Cited (PTO-892) 18) Interview Summary (PTO-413) Paper No(s). | 13) ☐ a) ☐ *Se | Acknowledgement is made of a claim for foreign process. All b) Some* c) None of: Certified copies of the priority documents have compared to the priority documents have copies of the certified copies of the priority documents have application from the International Bureau ee the attached detailed Office action for a list of the | e been received e been received ocuments have au (PCT Rule 17 e certified copie | I. I in Applic been rece 7.2(a)). is not rec | cation N eived in eived. | lo this National Stage | |
| 15) Notice of References Cited (PTO-892) 18) Interview Summary (PTO-413) Paper No(s). | Attachm | ent(s) | | | | | |
| | _ | | 18) 🔲 Interview Sur | mmary (PTO-4 | 113) Paper | No(s) | |
| 16) Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) Notice of Informal Patent Application (PTO-152) | | | _ | | | | |
| 17) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 20) Other: | 17) 🔲 In | formation Disclosure Statement(s) (PTO-1449) Paper No(s). | 20) Other: | | | | |

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DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 15-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicant's use of the word "density" is indefinite. The density of a pixel matrix is the inverse of the size. Applicant has argued that this is not what is meant in this application, leaving the intended meaning as unknown and not understood.

Claim Rejections - 35 USC § 102

2. Claim 14-17-20, 22, 24 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Parulskie et al, U.S. Patent # 5,828,406.

This reference discloses LCD's having pixels with widths 2/3rds of their heights (column 1, lines 60-65). Parulski discusses the remapping of the pixels (see abstract associated figure). Therefore, these claims are anticipated by this reference.

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3. Claims 15, 17-24 is rejected under 35 U.S.C. 102(e) as being clearly anticipated by Ishimoto et al, U.S. Patent # 5,594,564.

This reference discloses pixels with a 30 to 1 height to width (see abstract, title and associated figures). Therefore, these claims are anticipated by this reference.

4. Claim 15, 17-24 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Aoki et al, U.S. Patent # 4,654,117.

Aoki discloses a liquid crystal device in which three pixel electrodes with a width of approximately 1/3 of the high are used side by side to create a full color display. As discussed in the rejection under 112 above, it is unclear what meaning applicant is intending to use for pixel, so the common usage established in the LCD technology of a pixel being defined by the pixel electrode. Therefore, the disclosures of figures 6 and 7 anticipate the claimed invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

5. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Parulskie et al, U.S. Patent # 5,828,406.

Lacking form the disclosure is the claimed brightness level. **It was well known that higher brightness was more desirable for the end user, and therefore it would have been obvious, to employ a high brightness light source producing a high brightness image as was well known in the industry as desirable.

6. Claims 16 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishimoto et al, U.S. Patent # 5,594,564.

Lacking form the disclosure is the claimed brightness level. It was well known that higher brightness was more desirable for the end user, and therefore it would have been obvious, to

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employ a high brightness light source producing a high brightness image as was well known in the industry as desirable.

Additionally, the rescaling of images and the conversion of a black and white image to be displayed in a color display were **conventionally employed in computers which drove LCDs, and well known for enabling the viewing of arbitrary images, and therefore obvious for the conventional nature as well as the advantage of enabling the viewing of arbitrary images.

7. Claims 16 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoki et al, U.S. Patent # 4,654,117.

Lacking form the disclosure is the claimed brightness level. It was well known that higher brightness was more desirable for the end user, and therefore it would have been obvious, to employ a high brightness light source producing a high brightness image as was well known in the industry as desirable.

Additionally, the rescaling of images and the conversion of a black and white image to be displayed in a color display were **conventionally employed in computers which drove LCDs, and well known for enabling the viewing of arbitrary images, and therefore obvious for the conventional nature as well as the advantage of enabling the viewing of arbitrary images.

Any item marked with () is given as official notice.

Note: Any assertions that an element, practice or relationship was conventional has the incorporates the motivations of the benefits of having established supply chains, well understood behavior and manufacturing methodologies.

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Response to Arguments

Applicant's arguments filed have been fully considered but they are not persuasive.

Applicant argues that the references are silent on the density and only refer to pixel size.

As pixel size is the inverse of density (larger size=smaller density), these refer to the same

exact feature. Applicant has continued to assert that these are different (stating that by

mentioning both in the claim, some how makes them different), however has not provided

any explanation on how the density, which is the inverse of size, is in any way different.

Applicant's confirmation of the meaning used for pixel electrode is acknowledged, and the

112 rejection was. However, this meaning implies that the language includes side by side color

triads, which give a 3:1 ratio even for square pixels, and of which there are dozens or hundreds of

references which be 102 references (the reference applied being just one example).

Applicant has not traversed any of the assertions that elements or techniques were well

known, and, as applicant has acquiesced to these assertions they are considered to be admitted

prior art.

Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth Parker whose telephone number is (703) 305-6202. The fax phone number for this Group is (703) 308-7722. Any inquiry of a general nature or relating to the status of this application or preceding should be directed to the Group reception at whose telephone

number is (703) 308-0956.

March 24, 2002

KENNETH ALLEN PARKER PRIMARY PATENT EXAMINER GAU 2871